Data_Movement

title: Data Movement - Point-to-Point movement of large data volumes

description: Propose an architectural trade study that will evaluate various approaches to data distribution and data movement in the following representative use-case scenarios. Movement of data from instrument teams to the Planetary Data System Delivery of data from the Planetary System to the National Space Science Data Center (NSSDC) Distribution of large-scale data products to the scientific community Initially focus on point-to-point data movement
taskClassification: PROTOTYPES

PSA/PDS_Interoperability

title: PSA/PDS Interoperability Prototype

description: Write a White Paper which addresses a solution for locating and retrieving scientific data across Space Agency boundaries and from differently structured data systems. A small team of engineers and scientists from the NASA Planetary Data System (PDS) and the ESA Planetary Science Archive (PSA) has considered how to implement an agency independent data query and retrieval standard. As a first step towards such an ambitious goal, this White Paper proposes the adoption of a limited standard protocol to demonstrate interoperability between PDS and PSA to provide reciprocal access to their data.
taskClassification: INTEROPERABILITY

Data_Node_Documentation

title: Data Node Documentation

description: Document an engineering approach for, and the issues associated with, establishing a Data Node. Topics to be included are: 1. If and when it is appropriate to establish a Data Node, 2. The mechanism by which a Data Node is established, 3. The agreements that define the roles, responsibilities, and tasks that each party (to the agreements) will perform, 4. How the Data Node will be incorporated into the PDS infrastructure, 5. Plans for dissolving the Data Node.
taskClassification: ARCHITECTURE

General_Search

title: General Search

description: Propose an architectural trade study that will evaluate and benchmark various approaches for providing the range of search capabilities expected by community users. Develop a phased implementation plan, initially providing simple search modes (i.e. text) for most PDS resources and later adding more difficult capabilities (i.e. data product geographic location and time range constraints) Determine the most efficient methodology for extracting metadata from the PDS archive and making it available to support a general search functionality across the archive. Recommend standard catalog search APIs.
taskClassification: PROTOTYPES

PDS_Systems_Architecture

title: PDS Systems Architecture

description: Document the PDS-D architecture.
taskClassification: ARCHITECTURE